

before publishing it as new, to the inspection of Mr. R. B. Sharpe, who also declares it to be undescribed. Only *one* specimen was obtained. Wings and tail very short.

Bremen, March 5, 1874.

XX.—*Notice of Père David's Travels in China.*

By P. L. SCLATER.

THE recently completed seventh volume of the 'Nouvelles Archives du Muséum d'Histoire Naturelle de Paris' contains a most interesting report, addressed to the Professors of the museum by the celebrated traveller, Père Armand David, on his travels in the interior of China. So little is generally known concerning the exact countries in which Père David's extraordinary zoological discoveries were made, that we propose to give a short abstract of this memoir for the information of our readers.

Père David started from his residence in the province of Peking on the 26th of May, 1868, and returned from his expedition, after an absence of twenty-five months, on the 24th of June, 1870. The first halting-place on his route was at Ching-kiang, in the province of Kiangsu, in Central China, where four months were passed in waiting for a favourable opportunity of continuing his travels westwards. This locality having been already accessible to Europeans for the last eight years, and not being very rich in animal life, only thirty species of birds were obtained there. Amongst these, however, were the new Nuthatch, described by Verreaux as *Sitta sinensis*, and other species new to the Museum of Paris.

It was not until the 13th November, 1868, that Père David succeeded in making arrangements to quit Kiangsu and to ascend the Yangtze-Kiang, or, as the Chinese call it, the Ta-Kiang or Great River. He proceeded by steamer as far as Hankow, and thence in a Chinese junk through a series of canals and lakes towards the ancient city of Ichang. After eight or ten days of this slow navigation, the Great River was rejoined, and the traveller entered a larger junk, which was

destined to carry him to Setchuan. From Hankow to Chong-kin not less than sixty-four days were required to traverse the numerous rapids which flow through the imposing gorges met with in this part of the Yangtze. From Chong-kin, leaving his baggage to follow by water, our traveller took a more direct route by land, and in twelve days' journey reached Ching-tou, the capital city of the great province of Setchuan. The first two months of the year 1869 were passed in making collections in the environs of this city, and in the mountain-range which lies two days' journey to the north of it. Ching-tou lies in the midst of a fertile and well-cultivated plain, traversed by numerous canals, at an altitude of about 1500 feet above the sea-level. This part of China is much better wooded than any of the eastern portion, though no actual forests are found until the further frontiers are reached. At the end of February 1869, Père David left Ching-tou for the principality of Moupin, where most of his important discoveries were made. This district, which does not appear to be marked in any of our maps, is described as belonging to the "Mantze," or independent barbarians, who are neither Chinese nor Thibetans, but rather more allied to the latter. They form a number of small autonomous states, having their own laws and, in some cases, their own languages. The journey thither from Ching-tou lasted eight days, the second half of which was very arduous on account of the steep mountain-range it was necessary to pass, over snow and ice. At the summit of the pass between China and Moupin the barometer indicated a height of 3000 metres, or 9843 English feet.

Père David's ordinary residence in Moupin was near the summit of one of the chief valleys of the principality, at an elevation of 2129 metres, or a little less than 7000 feet above the sea-level. Just as he arrived in this strange country a somewhat serious check was caused to his collecting by the issue of a sovereign edict against hunting of any kind, on account of a metempsychosis of Buddha that had just taken place. Happily the hunters of Moupin were not very scrupulous, and this difficulty was overcome by a slight addition to their pay. The highest mountain of Moupin, called *Hong-chan-tin*, was only

a day's journey from Père David's habitation ; and he ascended the principal summit, which he calculated to be at an elevation of about 5000 metres, or 15000 feet. Thence, on the north and south-west, large masses of snow-clad mountains were visible. Although the centre of Moupin lies between the 31st and 32nd degree of latitude north, the winter is severe in the valley, and the ice and snow lasted for several months. Besides, all the year round there were showers of rain or snow, and frequent mists. The mountains are densely wooded up to an elevation of 9000 or 10,000 feet.* The forest consists principally of pines and cedars. Rhododendrons abound, no less than sixteen different species being found, some of which attain a considerable size. Magnolias and several sorts of *Laurus* are also met with. The flora generally is stated to be very rich. In these forests the many remarkable species of mammals were discovered which M. Alphonse Milne-Edwards has lately described from Père David's collection. Amongst them the most novel are the *Rhinopithecus rozelanæ*, a monkey which is found in the highest forests, and the extraordinary *Eluropus melanoleucus*, which inhabits the same districts. In his report, Père David gives a list of no less than 110 species of mammals of which he obtained specimens, either in Moupin, or in the adjoining districts north of the Yang-tze. Of these, not less than 40 were new to science.

Of the birds of Moupin, Père David has given a nominal list in a previous number of the Bulletin*.

In the report before us he mentions that his list embraces 469 species, of which 50 were new to science, and about 90 others new to the fauna of China. The splendid new Monaul, *Lophophorus lhuysi*, frequents the open prairies above the forest-region at an elevation of 12,000 feet, but is not very numerous.

Tetraophasis obscurus and *Ithaginis geoffroyi* do not occur out of the forests, whilst *Pucrasia xanthospila* is found in them and also in the mountains above. The Amherst's Pheasant (*Thaumalea amherstiae*) inhabits the bamboo-thickets, at an ele-

* "Catalogue des Oiseaux de Chine observés dans la partie septentrionale de l'Empire &c.," Nouv. Arch. d. Mus. vii. Bull. p. 1.

vation of from 6000 to 9000 feet; while *Lerwa nivicola* keeps to the rocks, above 12,000 feet in altitude. Similar interesting details are given respecting the principal discoveries in reptiles, insects, and other branches of the fauna of Moupin.

At the end of the year 1869 Père David left Moupin, nearly worn out by the fatigues and privations he had suffered, and returned to Ching-tou, the capital of Setchuan, to recruit himself under the kind hospitality of Monsignor Pinchon, the Apostolic Vicar of that district. Before returning homewards, however, he determined to make a rapid excursion into the basin of the Kokonoor, and, starting the day after Christmas-day, arrived, after twelve days' travelling, and crossing a high range of mountains, in a wooded valley in the eastern corner of this watershed. After traversing the plain of Setchuan, hills of small elevation were first met with: thence to arrive at Longanfou, on the north-west, four days' march were necessary, and higher elevations were entered upon. The parts of the basin of the Kokonoor visited by Père David did not in general appearance differ much from Moupin; but a few novelties were met with. The most remarkable of these was the *Crossoptilon cærulescens*, which is most probably the true *Phasianus auritus* of Pallas. Other new species discovered here were *Ianthocinclia artemisiæ*, *Suthora conspicillata*, *Allotrius pallidus*, and *Ixos xanthorrhæus*.

Père David returned to Ching-tou again about the end of March, and after a month's stay, in order to recruit his health and to put his collections in order, descended the Yangtze to Shanghai, arriving at that city on the 18th of June, in an exhausted state of health, and nearly overcome by the fatigue of his long and wearisome journeyings.

The great interest of Père David's discoveries consists not only in the number of strange and startling novelties met with, but likewise in the fact that he has shown the existence on the Chinese slopes of the great central range of Asia of a fauna corresponding to that of Nepaul and the Indian face of the Himalayas. Thus in mammals the *Ælurus* and *Budorcas* of the Himalayas are met with, as well as the new form, *Æluropus*. As regards the ornithology of Moupin, Mr. H. J.

Elwes has so well put forward its leading features in his recently published article on the geographical distribution of Asiatic birds*, that I cannot do better than conclude this short notice of Père David's wonderful discoveries by repeating what Mr. Elwes has said.

"We now see that the Himalayan range is not, as it seemed to be, an isolated range of mountains, possessing a fauna of its own, but simply the boundary of a vast tract of mountainous country extending over the whole of Southern China and Indo-China, and showing, wherever its elevation exceeds about 4000 feet, the same peculiar forms. It is *par excellence* a region of mountains; for wherever cultivated plains of low elevation are found, there the birds of the forest and the mountain disappear, and are poorly replaced, as in India and Eastern China, by other more wide-spread and well-known genera.

"This region is the headquarters of the Phasianidæ, the Timaliidæ, and Leiotrichinæ of Jerdon, and is, compared with most parts of the world, very poor in Raptores and Grallatores.

"Out of 170 species of birds obtained in Moupin by Père David, only 9, namely *Picoides funebris*, *Coccothraustes vulgaris*, *Chlorospiza sinica*, *Eophona personata*, *Thaumalea amherstiae*, *Crossoptilon tibetanum*, *Tetraophasis obscurus*, *Cholornis paradoxa*, and a genus allied to *Pnoëpyga* and *Troglo-dytes*, are of genera *not* found in the Himalaya; 61 belong to genera either peculiar to or highly characteristic of those mountains; only 21, or about 12 per cent., belong to genera common to the whole of the Indo-Malay region,—showing that, as far as our present knowledge extends, Moupin, though not so rich in species as Sikim or Nepal, is, from the absence of a low flat plain like the Terai, a district more characteristic of the Himalo-Chinese subregion than any part of the Himalaya itself.

"Among the most curious birds found here may be mentioned *Cholornis paradoxa*, Verr., a bird so like *Heteromorpha unicolor*, Hodgs., that if the feet were cut off I do not think

* P. Z. S. 1873, p. 645.

it could be distinguished. It has, however, the outer toe aborted in such a peculiar way that it has been made by its describer the type of a new genus. This bird seems to have the same habit of skulking in dense jungle of hill-bamboo that I have observed in *Paradoxornis*, *Heteromorpha*, and *Suthora*.

"*Pnoëpyga troglodytoides*, Verr., is another curious bird, doubtfully assigned to that genus by its describer, and very different in appearance from any *Pnoëpyga* I have seen.

"Many species previously only known from the Himalaya were found in Moupin by M. David—among them *Grandala caelicolor*, Hodgs., *Cinclus cashmeriensis*, Gould, *Lerwa nivicola*, Hodgs., and *Accentor nipalensis*, Hodgs., all birds which I have only seen at elevations above 14,000 feet in Sikim. Coupling with this the absence of Barbets, Fruit-Pigeons, Trogons, Hornbills, and the tropical genera of Woodpeckers, all birds which are found as high as 5000 or 6000 feet in Sikim, I conclude that the lowest valleys in this part of Thibet are of a much more alpine nature than in Sikim, and subject in winter to a more severe climate."

XXI.—*New and forthcoming Bird-Books.*

By the ACTING EDITOR.

AT no previous period, we believe, has so much ornithological work been going on as at the present time. In every branch of our favourite science great activity is now manifested. A few words, therefore, on the leading events of the day may not be unacceptable to such of our readers as live away from the great centres of civilization.

Commencing with the Palæarctic Region, Mr. Gould's great work on the birds of Great Britain is now complete, and his numerous subscribers are struggling to get their copies bound as quickly as possible. No bird-book, it is whispered, has ever had such a financial success. Every copy of a large edition is either already disposed of, or likely to be so within a very short period, and the work will quickly rise to a premium. Nor is this any matter for wonder, when we turn over